Revving up the Competition

High gas prices? No problem for students participating in the annual Arkansas Electric Vehicle Rally. But the winners of this year's rally would like to spark a lot more competition. With that in mind, 14 students from Corning High School and their instructor, Charles Arnold, are hitting the road next week to get students and teachers at Batesville and Mountain Home charged up about building their own electric vehicle in time for next year's rally.

The Electric Cooperatives of Arkansas helped launch the program four years ago by buying Corning High School its first EVMaster kit. The students in Arnold's Principles of Technology/Physics in Context class built the vehicle and then headed to Atlanta to compete in a regional rally. The program was such a success that the electric co-ops sponsored the first state rally the next year and every year since. This year's rally featured four Arkansas teams – two from Corning and one each from Berryville and Paragould.

In Corning, that first kit and what it did for the students electrified the school and the community. The principal was so impressed that he bought the students a second kit. (Every year, the students break the vehicles down and rebuild them, tweaking and fine-tuning them for peak performance.) And then the school built a new classroom for the program.

The community has gotten behind the effort by donating money for travel and cheering on Team Corning. All the effort paid off this year with Corning's first win at the state rally and a starring role – along with Paragould – in a DVD put out by the Cooperative Research Network, a national group trying to get more schools across the country interested in the program.

EV rallies integrate intensive academic and hands-on driving events. They begin with technical inspections and rigorous safety inspections of the vehicles, followed by acceleration and autocross competitions. The students then leave the track to give oral presentations on such topics as the environment or alternative fuels and participate in a quiz bowl on science and electric vehicles. They return to the track for the final event – a test to see how far each vehicle can go on a single charge. This last competition can be won or lost by the team's on-track and pit lane strategies.

Having taught chemistry and physics for 34 years, Arnold is sold on the EV program. It's the only program that engages the students and gives them a hands-on application of what they learn in class, he says. While teaching, he often finds himself using things that happened with the electric vehicle as practical examples.

Although the activity goes hand-in-hand with the physics curriculum, it uses knowledge from a lot of fields – math, auto mechanics, engineering, electronics, and drama (for the presentations). Arnold says it also appeals to students who might not be involved in other school activities, giving them a reason to stay in school and an accomplishment to be proud of.

"They don't have to worry about sitting on the bench," he adds.

In the future, Corning may have a run for its money now that the EV program has been approved as a program improvement activity for Principles of Technology/Physics in Context classes. But Arnold and his students aren't sweating it. In fact, Arnold hopes there will be enough interest that Arkansas can host a regional rally similar to the one held in Atlanta.

As for the increased competition? Bring it on, Team Corning says.